

PATENT

Atty. Dkt. No. ROC920010041US1

MPS Ref. No.: IBMK10041

REMARKS

This is intended as a full and complete response to the Final Office Action dated April 14, 2005, having a shortened statutory period for response set to expire on July 14, 2005. Applicants submit this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-23 are pending in the application. Claims 1-23 remain pending following entry of this response. Claims 1, 8, 12 and 19 have been amended. Applicants submit that the amendments do not introduce new matter.

Further, Applicants note that the bulk of the previous amendments were made in error and the claims have been returned to there pre-amended state (with the exception of 112 corrections). As such, Applicants submit that the amendments do not raise new issues requiring further consideration or search. Further, Applicants submit that the withdrawal of the amendments ensures that the Applicants are entitled to a full range of equivalents.

Claim Rejections - 35 U.S.C. § 112

Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8, from which claims 9-10 depend, has been amended to more clearly recite the respective lists as interpreted by the Examiner. Applicants submit that the amendment does not raise any new issues.

Claim Rejections - 35 U.S.C. § 103

Claims 1-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Badovintz et al.* (US 6,026,426, hereinafter *Badovintz*), and further in view of *Molin et al.* (US 5,999,712, hereinafter *Molin*). Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill

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in the art, to modify the reference or to combine the reference teachings. Second, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Third, there must be a reasonable expectation of success. See MPEP § 2143. The present rejection fails to establish at least the first and the second criterion.

Badovinat discloses an application programming interface for managing membership of a processor (or processor) group in which a group leader is utilized to coordinate changes in the membership with the other members of the group. For example, for a request to join the group, the group leader receives the join request and performs a prescreening test to determine whether the other group members need to be informed of the request (via multicast) and to vote on the request. The request is approved when all votes indicate approval. (See *Badovinat*, Col. 12, line 54 to Col. 13, line 58).

Moiin discloses a method for determining cluster membership in a distributed computer system in which each node receives connectivity information and applies a membership algorithm to determine a proposed new cluster $M_{i\text{prop}}$. The new cluster represented by more proposed new clusters is elected as the new cluster. (See *Moiin*, Col. 4, lines 24-40).

The Examiner takes the position that *Badovinat* discloses substantial features of the claimed invention but fails to disclose each group member accessing its respective copy of the domain to determine whether the requestor is indicated in its respective copy. The Examiner further states that these features are well known in the art and would have been an obvious modification of the system disclosed by *Badovinat*, as evidenced by *Moiin*.

First Criterion: No Motivation to Combine

Motivation is lacking where the proposed modification of the reference renders the reference inoperable for its intended purpose or where the proposed modification of the reference changes a principal of operation of the reference. MPEP § 2143.01. In this case, Applicants submit that the proposed modification of *Badovinat* violates either, or both, of these rules for the following reasons.

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When a suggestion to combine is being made, reliance on the teachings of *Badovinat* regarding membership lists must account for the manner in which *Badovinat* uses such lists. Applicants submit that once the manner in which *Badovinat* uses membership lists is understood, the proposed modification is rendered untenable. In the case of processor groups (the portion of *Badovinat* relied on by the Examiner) *Badovinat*, a group leader adds a requesting processor to a processor group. The Group Services daemon of the group leader then updates its membership list to reflect the addition of the requesting processor. The group leader then informs each of the other Group Services daemons of the processor group to update their respective membership lists to reflect the newly joining processor. Therefore, at any given time, the membership lists of *Badovinat* reflect the current members in a given processor group, including the group leader. While the Office Action does not state which element of *Badovinat* is believed to be the claimed "requestor", Applicants presume the Examiner believes the joining processor is the "requestor". However, in this case, the Examiner is arguing that the group leader would be the claimed "interface" which is nonsensical because the group leader would not request each of the other member processor to access their respective membership lists in order to determine whether the group leader was indicated in the respective membership lists. The group leader maintains its own membership list and, by definition, is the entity responsible for initiating updates to the other membership lists of the respective processors in the processor group. Therefore, the proposed modification introduces functionality into *Badovinat* that is inconsistent with the basic operation of *Badovinat*. If Applicants' presumptions regarding which teachings of *Badovinat* the Examiner believes correspond to the claimed elements are incorrect, the Examiner is kindly requested to provide detailed clarification.

Further, a number of claims (including independent claims 8, 12 and 19) recite that the respective domains or lists of respective jobs in a group are accessed to determine whether a requesting member job desiring to join the group is included in each list. In *Badovinat*, however, the membership lists are updated to reflect that a new processor has been added to the group. Consequently, the decision of whether or not to add/join a requesting processor to a processor group in no way involves

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reference to the respective membership lists. The membership lists merely reflect a decision that has already been made by the group leader. Accordingly, any suggestion to modify *Badovintz* in a manner that requires the processors of the processor group to access their respective membership lists in order to determine whether a requestor desiring to join a group is indicated in the respective lists is incompatible with the teachings of *Badovintz*. This is particularly so with respect to claims (such as claim 9) in which the requesting member job is joined to the group after determining that the requesting member job is included in at least one list. In *Badovintz*, an entity requesting entity is not added to the respective membership lists list until the requesting entity is added to the group. In other words, in *Badovintz*, being added to the group is a condition to being on the list; whereas, in the claims, being on the list is a condition to being added to the group.

For each of the foregoing reasons, both individually and collectively, Applicants submit that the proposed modification lacks motivation. Therefore, the rejection is believed to be improper, and Applicants respectfully request that the rejection be withdrawn and the claims be allowed.

Second Criterion: All limitations not present

The Applicants submit that all claim limitations are not present in the proposed modification. The Examiner argues that *Moiin* discloses each member of a group accessing its respective copy of the membership list to determine whether the requester is indicated in its copy of the list. For this proposition the Examiner cites Column 11, lines 59-67 and Column 12, lines 48-66 of *Moiin*. However, the cited portion of *Moiin* refers to a proposed set provided by each of the nodes. Each proposed set can be different, which is why *Moiin* teaches that each node needs to compare the proposed set from the other nodes. Column 11, lines 66-67. Accordingly, the definition of the "proposed set" is fundamentally incompatible with the claimed membership lists (which the Examiner argues is the same as the "proposed sets"). The claims clearly recite that each member in the group has a copy of the same membership list or domain. The claimed copy, which is the same for each group member (e.g., job), is simply not the same as a proposed set, which can be different for each node. Therefore, since *Moiin*

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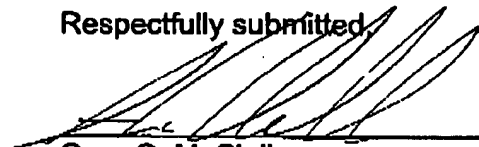
does not teach the claimed element suggested by the Examiner, a prima facie case of obviousness has not been established. Therefore, Applicants respectfully submit that the rejection is improper and request that the rejection be withdrawn and the claims be allowed.

Therefore, Applicants submit that the references cited by the Examiner, either alone or in combination, do not teach, show or suggest the pending claims. Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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